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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,220	03/19/2001	Toshihiro Aruga	Q63638	6913

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EXAMINER	
DADA, BEEMNET W	
ART UNIT	**PAPER NUMBER**
2135	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/810,220	ARUGA, TOSHIHIRO	
	Examiner	Art Unit	
	Beemnet W. Dada	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10-17,19-24 and 26-31* is/are rejected.

7)☒ Claim(s) *9, 18, 25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in reply to an amendment filed on February 21, 2006. Claims 1-31 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakano et al US Patent 5,987,438 (hereinafter Nakano).

4. As per claim 1, Nakano teaches a portable terminal (column 10, lines 17-29) comprising:

a storage device which stores secret data (i.e., IC card column 10, lines 7-9, and abstract);

a system unit which receives said secret data from said storage unit to carry out a predetermined process associated with said secret data (abstract, column 10, lines 29-41 and column 11, lines 9-20);

a signal transfer line set which is provided between said storage device and said control unit and on which a control signal and said secret data are transferred, said control signal relating to the transfer of said secret data [column 11, lines 9-36]; and

a control section, which is connected to said signal transfer line set and validates transfer of said control signal from said storage device to said system unit or from said system unit to said storage device on said signal transfer line set to permit the transfer of said secret data [column 11, lines 9-36 and column 13, line 55 – column 14 line 10].

5. As per claims 2 and 3, Nakano further teaches the terminal, wherein said storage device is detachable and said secret data is personal data of the user / electronic money data [abstract and figures 1-3].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 4-5 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano US Patent 5,987438 in view of Nakamura et al (hereinafter Nakamura), US Patent 5,917,168.

8. As per claims 4, Nakano discloses the claimed limitations as described above (see claims 1). Nakano does not explicitly teach stopping said predetermined process when said secret data cannot be received from said storage device within a predetermined time period after said control signal is outputted from said system unit to said storage device. However, Nakamura discloses a terminal with detachable memory (abstract) wherein a predetermined process is stopped when secret data cannot be received from said storage device within a

predetermined time period after said control signal is outputted from said system unit to said storage device (col 9 ln 48-58).

Both Nakamura and Nakano disclose a means of financial transaction through use of a detachable memory, device at a terminal. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the stopping means of Nakamura within the system of Nakano because it would have prevented a deadlock situation and increased security through validation of such data received. Furthermore, such stopping schemes are well known to be good software practice.

9. As per claims 5, Nakano-Nakamura discloses the claimed limitations as described above (see claims 4). Nakamura further discloses wherein said system unit carries out said predetermined process when said secret data is received from said storage device within the predetermined time period after said control signal is outputted from said system unit to said storage device (col 9 ln 59-65).

10. As per claim 13, Nakano teaches a portable terminal (column 10, lines 17-29) comprising:

a storage device which stores secret data (i.e., IC card column 10, lines 7-9, and abstract);

a system unit which receives said secret data from said storage unit to carry out a predetermined process associated with said secret data (abstract, column 10, lines 29-41 and column 11, lines 9-20);

a signal transfer line set which is provided between said storage device and said control unit and on which a control signal and said secret data are transferred, said control signal relating to the transfer of said secret data [column 11, lines 9-36]; and

a control section, which is connected to said signal transfer line set and validates transfer of said control signal from said storage device to said system unit or from said system unit to said storage device on said signal transfer line set to permit the transfer of said secret data [column 11, lines 9-36 and column 13, line 55 – column 14 line 10].

Nakano does not explicitly teach wherein said system unit carries out said predetermined process being performed when said secret data is received from said storage device within the predetermined time period after said control signal is outputted from said system unit to said storage device (col 9 ln 59-65). However, Nakamura discloses a means of financial transaction using a electronic money card wherein said system unit carries out said predetermined process when said secret data is received from said storage device within the predetermined time period after said control signal is outputted from said system unit to said storage device (col 9 ln 59-65).

Both Nakamura and Nakano disclose a means of financial transaction through use of a detachable memory, device at a terminal. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the stopping means of Nakamura within the system of Nakano because it would have prevented a deadlock situation and increased security through validation of such data received. Furthermore, such means of validation are well known to be good software practice.

11. As per claim 14, Nakano discloses the claimed limitations as described above (see claim 13). Nakamura further discloses a terminal with detachable memory (abstract) wherein a

predetermined process is stopped when secret data cannot be received from said storage device within a predetermined time period after said control signal is outputted from said system unit to said storage device (col 9 l n 48-58).

Both Nakamura and Nakano disclose a means of financial transaction through use of a detachable memory device at a terminal. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the stopping means of Nakamura within the system of Nakano because it would have prevented a deadlock situation and increased security through validation of such data received. Furthermore, such stopping schemes are well known to be good software practice.

12. Claims 6-7 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al. US Patent 5,987,438 in view of Nakamura et al (hereinafter Nakamura), US Patent 5,917,168, and further in view of Tetro et al (hereinafter Tetro), US Patent 6,095,413.

13. As per claims 6 and 15, Nakano-Nakamura discloses the claimed limitations as described above (see claims 4 and 13). Nakano-Nakamura does not explicitly teach wherein said system unit determines whether a total amount of electronic money used within a predetermined time interval is equal to or less than a predetermined amount of electronic money when said secret data is received from said storage device within the predetermined time period after said control signal outputted from said system unit to said storage device, and carries out said predetermined process when it is determined that the total amount of electronic money used within the predetermined time interval is equal to or less than the predetermined amount of electronic money. Tetro discloses a means for electronic transaction using electronic money cards (credit cards, abstract) wherein a total amount of electronic money used within a

predetermined time interval is equal to or less than a predetermined amount of electronic money when said secret data is received, is determined (col 7 ln 1315), and carries out said predetermined process when it is determined that the total amount of electronic money used within the predetermined time interval is equal to or less than the predetermined amount of electronic money (col 7 ln 1230).

Both Nakano-Nakamura and Tetro disclose a means for electronic transactions involving use of a detachable memory device (electronic money cards). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Tetro within the Nakano-Nakamura combination because it would have increased security through preventing friendly fraud).

14. As per claims 7 and 16, Nakano-Nakamura-Tetro discloses the claimed limitations as described above (see claims 6, 15, and 23). Tetro further discloses wherein said system unit stops said predetermined process when it is determined that the total amount of electronic money used within the predetermined time interval is larger than the predetermined amount of electronic money (col 7 ln 8-30).

15. Claims 8, 10-12, 20, 24, 26, 28, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano US Patent 5,987,438 in view of Sloan US Patent 6,179,205 B1.

16. As per claim 20, Nakano teaches a portable terminal (column 10, lines 17-29) comprising:

a storage device which stores secret data (i.e., IC card column 10, lines 7-9, and abstract);

a system unit which receives said secret data from said storage unit to carry out a predetermined process associated with said secret data (abstract, column 10, lines 29-41 and column 11, lines 9-20);

a signal transfer line set which is provided between said storage device and said control unit and on which a control signal and said secret data are transferred, said control signal relating to the transfer of said secret data [column 11, lines 9-36]; and

a control section, which is connected to said signal transfer line set and validates transfer of said control signal from said storage device to said system unit or from said system unit to said storage device on said signal transfer line set to permit the transfer of said secret data [column 11, lines 9-36 and column 13, line 55 – column 14 line 10]. Nakano is silent on a switch section which generates a valid signal in response to operation of the switch section by a user. However operation of a switch section by a user is well known in the art which has the advantage of enhancing security of information stored in an IC card. For example Sloan teaches a portable terminal having a smart card wherein a switch section in the smart card generates a valid signal in response to operation of said switch by a user [see for example column 6, lines 33-45 and column 8, lines 50-64]. It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to employ the teachings of Sloan within the system of Nakano in order to further enhance the security of the system.

17. As per claims 8, 10-12, 26, 28, 29 and 31, Nakano teaches the portable terminal as applied to claim 1 above (see claims 1 and 13 above). Nakano is silent on a switch section which generates a valid signal in response to operation of the switch section by a user. However operation of a switch section by a user is well known in the art which has the advantage of enhancing security of information stored in an IC card. For example Sloan teaches a portable

terminal having a smart card wherein a switch section in the smart card generates a valid signal in response to operation of said switch by a user, further including generation of a signal which permits transfer of the control signal [see for example column 6, lines 33-45 and column 8, lines 50-64]. It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to employ the teachings of Sloan within the system of Nakano in order to further enhance the security of the system.

18. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano US Patent 5,987,438 in view of Sloan US Patent 6,179,205 B1 as applied above and further in view of Nakamura et al (hereinafter Nakamura), US Patent 5,917,168.

19. As per claim 21, Nakano-Solan discloses the claimed limitations as described above (see claims 20). Nakano-Solan does not explicitly teach stopping said predetermined process when said secret data cannot be received from said storage device within a predetermined time period after said control signal is outputted from said system unit to said storage device. However, Nakamura discloses a terminal with detachable memory (abstract) wherein a predetermined process is stopped when secret data cannot be received from said storage device within a predetermined time period after said control signal is outputted from said system unit to said storage device (col 9 ln 48-58).

Both Nakamura and Nakano-Solan disclose a means of financial transaction through use of a detachable memory, device at a terminal. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the stopping means of Nakamura within the system of Nakano-Solan because it would have prevented a deadlock

situation and increased security through validation of such data received. Furthermore, such stopping schemes are well known to be good software practice.

20. As per claim 22, Nakano-Solan -Nakamura discloses the claimed limitations as described above (see claim 21). Nakamura further discloses wherein said system unit carries out said predetermined process when said secret data is received from said storage device within the predetermined time period after said control signal is outputted from said system unit to said storage device (col 9 ln 59-65).

21. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano US Patent 5,987,438 in view of Sloan US Patent 6,179,205 B1, and further in view of Tetro et al (hereinafter Tetro), US Patent 6,095,413.

22. As per claim 23, Nakano-Sloan discloses the claimed limitations as described above (see claim 20). Nakano-Sloan does not explicitly teach wherein said system unit determines whether a total amount of electronic money used within a predetermined time interval is equal to or less than a predetermined amount of electronic money when said secret data is received from said storage device within the predetermined time period after said control signal outputted from said system unit to said storage device, and carries out said predetermined process when it is determined that the total amount of electronic money used within the predetermined time interval is equal to or less than the predetermined amount of electronic money. Tetro discloses a means for electronic transaction using electronic money cards (credit cards, abstract) wherein a total amount of electronic money used within a predetermined time interval is equal to or less than a predetermined amount of electronic money when said secret data is received, is

determined (col 7 ln 1315), and carries out said predetermined process when it is determined that the total amount of electronic money used within the predetermined time interval is equal to or less than the predetermined amount of electronic money (col 7 ln 1230).

Both Nakano-Sloan and Tetro disclose a means for electronic transactions involving use of a detachable memory device (electronic money cards). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Tetro within the Nakano-Sloan combination because it would have increased security through preventing friendly fraud).

23. As per claim 24, Nakano-Sloan-Tetro discloses the claimed limitations as described above (see claim 23). Tetro further discloses wherein said system unit stops said predetermined process when it is determined that the total amount of electronic money used within the predetermined time interval is larger than the predetermined amount of electronic money (col 7 ln 8-30).

24. Claims 17, 19, 27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano US Patent 5,987,438 in view of Nakamura et al, US Patent 5,917,168 as applied above and further in view of Sloan US Patent 6,179,205 B1.

25. As per claims 17, 19, 27 and 30, Nakano-Nakamura teaches the portable terminal as applied above (see claim 13). Nakano-Nakamura is silent on a switch section which generates a valid signal in response to operation of the switch section by a user. However operation of a switch section by a user is well known in the art which has the advantage of enhancing security of information stored in an IC card. For example Sloan teaches a portable terminal having a

smart card wherein a switch section in the smart card generates a valid signal in response to operation of said switch by a user, further including generation of a signal which permits transfer of the control signal [see for example column 6, lines 33-45 and column 8, lines 50-64]. It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to employ the teachings of Sloan within the system of Nakano-Nakamura in order to further enhance the security of the system.

Allowable Subject Matter

26. Claims 9, 18 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

27. Applicant's arguments filed February 21, 2006 have been fully considered but they are not persuasive. Applicant argued that the art on record fails to show a control section that is connected to the signal transfer line set, and therefore fails to teach the limitation " a control section which is connected to said signal transfer line set and validates transfer of said control signal from said storage device to said system unit or from said system unit to said storage device on said signal transfer line set to permit the transfer of said secret data. Examiner disagrees.

Examiner would point out that Nakano et al. (US 5,987,438) teaches an IC card lock generator (see for example, fig 1, unit 17 & fig 2 unit 114) that is connected to the controller (figs 1 and 2 unit 11) that is also connected to the interface unit (15) and IC card loader (110). Therefore, Nakano teaches a control section, which is connected to said signal transfer line set

and validates transfer of said control signal from said storage device to said system unit or from said system unit to said storage device on said signal transfer line set to permit the transfer of said secret data [column 11, lines 9-36 and column 13, line 55 – column 14 line 10]. Examiner asserts that the art on record teaches the claim limitations and therefore the rejection is respectfully maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beemnet W. Dada whose telephone number is (571) 272-3847. The examiner can normally be reached on Monday - Friday (9:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beemnet Dada

May 8, 2006

HOSUK SONG
PRIMARY EXAMINER